

2. (Twice Amended) A gas distribution plate as recited in claim 1 wherein the micro-defects are substantially eliminated before implementation within the semiconductor fabrication apparatus.

3. (Once Amended) A gas distribution plate as recited in claim 1 wherein the micro-defects are substantially eliminated by heating the portion.

5. (Twice Amended) A gas distribution plate as recited in claim 1 wherein, during its operation, the gas distribution plate produces less than 0.1 particle defects per square centimeter for a wafer processed in the semiconductor fabrication apparatus over the entire operating life of the gas distribution plate.

7. (Once Amended) A gas distribution plate as recited in claim 6 further comprising at least one distribution channel, wherein the at least one distribution channel is machined to a back face of the gas distribution plate.

8. (Once Amended) The gas distribution plate as recited in claim 1 wherein the gas distribution plate includes a material whose products from reacting with the process chemistry used in the semiconductor fabrication apparatus are gaseous.

12. (Once Amended) A plasma-based fabrication apparatus, comprising:  
a plasma chamber that receives process gases and forms a plasma therefrom;  
and  
a gas distribution plate including a plurality of holes that supply the process gases into said plasma chamber, a portion of said gas distribution plate being exposed to the process chemistry used in said plasma chamber, wherein the portion of the gas distribution plate has substantially no micro-defects about 50 micrometers or greater, after machining, that may lead to contamination of a wafer located within said semiconductor processing chamber.

13. (Once Amended) A plasma-based fabrication apparatus as recited in claim 12 wherein said plasma-based fabrication apparatus fabricates semiconductor devices.

14. (Once Amended) A plasma-based fabrication apparatus as recited in claim 12 wherein said plasma-based fabrication apparatus is a semiconductor etch machine.

15. (Once Amended) A plasma-based fabrication apparatus as recited in claim 12 wherein said gas distribution plate is pretreated by heating.

Please CANCEL claims 38-39 without prejudice to further prosecution.